UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>01 July 2005</u>.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-32</u> is/are pending in the application.

   4a) Of the above claim(s) <u>2,3,28 and 30</u> is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1,4-27,29,31 and 32</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>20 July 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This Office Action is in response to Amendment received 07/01/2005.

2.   Objections to the specification

3.   Claims 1-32 remain pending in this amendment. Claims 2-3, 28, and 30 have

been cancelled by the Applicant.

4.   Rejections of Claims 1, 27, and 31 under 35 U.S.C. 101 have been withdrawn as

necessitated by amendment. Rejection of Claim 32 under 35 U.S.C. 101 was made in

error and has been withdrawn.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1, 5-6, 7-21, and 23-27, 29, and 31-32 are rejected under 35 U.S.C.

103(a) as being unpatentable over Gramlich (U.S. Patent No. 5,826,025, filed

09/08/1995) in view of Nagao et al. (hereinafter Nagao, "Semantic annotation and

transcoding: making Web content more accessible", Multimedia, IEEE, Vol. 8, Issue 2,

Apr-Jun 2001 Page(s): 69-81).

In regard to independent Claim 1 (and similarly independent Claims 27, and

31-32), Gramlich teaches *specifying one or more annotations coded according to a first*

syntax of one of Hypertext Markup Language (HTML), Extensible Markup Language

(XML), Wireless Markup Language (WML), and Handheld Device Markup Language (HDML), wherein one or more annotations indicate one or more conditions for when they are to be inserted into a document in that a user requests a source document with a web browser either by selecting a hypertext link, or by issueing a document request by entering the desired document's URL in the web browser (Col. 4, lines 44-52). The browser then issues an HTTP document request message 117 specifying the URL of the requested document. Unlike existing browsers, the browser 112 issues the document request message 117 to the Annotation Overlay Proxy (AOP) 114 rather than to a firewall proxy or directly to the web servers (Col. 4, lines 53-57). The web browser 112 also issues an HTTP sources message (116) to the AOP (114). This is a new message that specifies the URLs of the overlay groups containing information to be merged by the AOP 114 with the document requested by the user (Col. 4, lines 61-66). Each annotation overlay 119 has five fields: (1) document URL, (2) source, (3) pattern, (4) action and (5) arg (short for argument), which respectively tell the AOP 114: (1) the URL of the document to which the annotated pertains; (2) which source contributed the annotation overlay; (3) what specific part (or pattern) of the returned document the overlay pertains to; (4) the action to take with respect to the pattern; and (5) any additional information to associate in the merged document with the pattern. This additional information can include text or graphics to be inserted in the merged document or a designation of a "type" annotation, such as grammar error ("gr"), spelling error ("sp"), "agree", or "disagree" (Col. 5, lines 52-67; Table 3). The pattern (3) is a pattern of words or pixels in the requested document that the AOP 114 must operate

on. The pattern syntax consists of a list of words or pixels making up the pattern set off

by balanced single quotes. For example, in the illustration above, the pattern the AOP

114 must search for in the document identified by the document URL

http://info.cern.sh/hypertext/WWW/Daemon/User is: `Files can be real or synthesized`.

The remaining fields (4) and (5) tell the AOP 114 what actions to take with regard to

occurrences in the corresponding document (Col. 9, lines 19-33).

Gramlich fails to explicitly specify a markup language for the annotations.

However, Nagao teaches annotations represented by XML formatted data (Pg. 71, Left-

hand Column, 2nd Paragraph under "External Annotation" heading). It would have been

obvious to one of ordinary skill in the art at the time of invention to combine the

teachings of Gramlich and Nagao as both inventions relate to annotating documents.

Adding the teaching of Nagao provides the benefit of annotating using formal markup

languages allowing for easier integration into existing markup language-based

documents.

Gramlich continues by teaching *selectively inserting the specified annotations in*

a target document coded according to a second syntax of a different one of HTML,

XML, WML, and HDML from the first syntax based on whether the indicated one or

more conditions are satisfied, thereby transcoding the target document in that when

creating the merged document 120, the AOP 114 first copies the requested document

to the merged document. The AOP 114 then adds the associated annotation overlays

119 to the merged document 120 in an order determined by the precedence of the

operation associated with each respective annotation overlay 119. In the preferred

embodiment, the operations' precedence order, from highest to lowest, is: insert,

replace, delete and program. This precedence order is inversely related to the degree of

disruption caused in the merged document 120 by a particular operation. For example,

a delete operation from a source 2 (overlay group 152) overlay might delete the pattern

needed for an insert operation from a source 1 (overlay group 150) overlay, but not vice

versa. Any other precedence scheme could also be implemented. Of course, even

given operator precedence, it is inevitable that sometimes the pattern required by an

overlay is not in the merged document. When this is the case, the AOP 114 appends

the annotation overlay 119 including that pattern to the merged document and links that

overlay to an "unassociated.sub.-- annotation" icon displayed at the beginning of the

document. By selecting an unassociated.sub.-- annotation icon, a user may read the

corresponding annotation overlay 119 which is displayed by the Web browser 112 (Col.

11, lines 62-67; Col. 12, lines 1-17). Hence, Gramlich teaches the selective insertion of

annotations based on conditions. The merged document is then returned to the user at

the web browser. From that point, it would have been obvious to one of ordinary skill in

the art at the time of invention to save the merged document to a file, making it available

to other applications for further processing such as advanced transcoding. It would have

also been obvious to one of ordinary skill in the art at the time of invention to assume

that the patterns being sought, and the eventual annotation could be anything. If for

example, the requested document was an HTML document, which it likely is in the

invention of Gramlich, anything that can be found in an HTML document could have

been acted upon with Gramlich's invention. The benefit of Gramlich's invention would

have been to prepare a requested document for a given user based on a number of

conditions. It is also noted that Nagao's annotations are stored in an XML format for

insertion into and association with any element of any HTML document (Pg. 71, Left-

hand Column, 1st Paragraph under "External Annotation" heading). Thus, it would have

also been obvious to one of ordinary skill in the art at the time of invention to combine

the teachings of Gramlich and Nagao as both references are related to annotation for

the purpose of transcoding documents. Adding the teaching of Nagao provides the

benefit of using a standardized language such as XML for storing annotations for

inclusion into a variety of other markup language documents such as those coded in

HTML.

In regard to dependent Claim 5, Gramlich teaches that *at least one of the*

specified annotations is specified inline within the target document in that the

annotations are merged with the target document (Col. 2, lines 66-67; Col. 3, lines 1-2).

In regard to dependent Claim 6, Gramlich teaches that at least one of the

inserted annotations requests clipping content from a document, and further comprising

clipping content from the target document based on the at least one of the inserted

annotations in that one of the action fields in the annotation overlays involves deleting

the specified pattern or a range of words/images surrounding the specified pattern; the

pattern is looked for in the requested document that is to be annotated (Col. 9, lines 45-

47).

In regard to dependent Claim 7, <u>Gramlich</u> fails to specifically teach that at least one of the inserted annotations describes changes to one or more form elements in a document, and further comprising changing one or more form elements in the target document based on the at least one of the inserted annotations. However, <u>Gramlich</u> does teach that the action field of the annotation overlays (insert, delete, replace, and Run_Program) would all affect changes to the requested document based on the pattern sought. It would have been obvious to one of ordinary skill in the art at the time of invention to assume that one of those patterns could have been to match form elements since both the overlays and the requested document are both written in HTML and one of the possible components in such a document could have been an HTML form. <u>Gramlich</u> would offer the benefit of changing anything contained in a typical HTML document including form elements.

In regard to dependent Claim 8, <u>Gramlich</u> teaches that *at least one of the inserted annotations prescribes one or more nodes to be replaced in a document, and further comprising replacing one or more nodes in the target document based on the at least one of the inserted annotations* in that the action field in each of the annotation overlays can contain a Replace attribute that acts to replace the specified pattern or a designated part of the document including the specified pattern with the contents of the arg field (Col. 9, lines 48-51).

In regard to dependent Claim 9, Gramlich fails to specifically teach that *at least*

one of the inserted annotations specifies one or more (attribute name, attribute value)

pairs to be inserted into a document, and further comprising inserting one or more

(attribute name, attribute value) pairs in the target document based on the at least one

of the inserted annotations. However, Gramlich does teach that the action field of the

annotation can contain an Insert attribute overlays (insert, delete, replace, and

Run_Program) would all affect changes to the requested document based on the

pattern sought. It would have been obvious to one of ordinary skill in the art at the time

of invention to assume that one of those patterns could have been to insert attribute

name/value pairs since both the overlays and the requested document are both written

in HTML and one of the possible components in such a document would have been a

HTML tag containing attribute name/value pairs (e.g., a hyperlink). Gramlich would offer

the benefit of changing anything contained in a typical HTML document including

name/value pairs.

In regard to dependent Claim 10, Gramlich fails to specifically teach that *at least one of the inserted annotations specifies fine-grained transcoding preferences to be inserted into a document, and further comprising inserting fine-grained transcoding preferences in the target document based on the at least one of the inserted annotations.* However, Gramlich does teach that the action field of the annotation overlays (insert, delete, replace, and Run_Program) would all affect changes to the requested document based on the pattern sought. It would have been obvious to one of ordinary skill in the art at the time of invention to assume that one of those actions could have been to insert fine-grained transcoding preferences since the invention of Gramlich is capable of inserting annotations regardless of what those annotations might contain. One of the goals in annotating any document is to enhance it in some way, so that it becomes more useful and informative to the eventual recipient. Inserting preferences to assist in further actions on the document would be just one of many examples of annotations that would enhance the document for the eventual recipient be that a person, or additional coding.

In regard to dependent Claim 11, Claim 11 reflects the method of enhancing document transcoding as claimed in Claim 10, and is rejected along the same rationale.

In regard to dependent Claims 12-15, Claims 12-15 reflect the method of enhancing document transcoding as stated in Claim 1, and are rejected along the same rationale.

In regard to dependent Claim 16, <u>Gramlich</u> teaches that *the location is expressed using positional information that is based upon target tags in a target* in that a pattern (3) is a pattern of words or pixels in the requested document that the AOP 114 must operate on. The pattern field is necessary, as the document URL in an annotation overlay does not provide *fine location* within a document but merely a pointer to the document as a whole. The pattern syntax consists of a list of words or pixels making up the pattern set off by balanced single quotes (Col. 9, lines 19-27).

In regard to dependent Claim 17, <u>Gramlich</u> does not explicitly teach that *the positional information enables case-insensitive matching of text in the target document*. However, given that the pattern field of <u>Gramlich</u> consists of a pattern of words or pixels in the requested document that the AOP 114 must operate on. The pattern field is necessary, as the document URL in an annotation overlay does not provide fine location within a document but merely a pointer to the document as a whole. The pattern syntax consists of a list of words or pixels making up the pattern set off by balanced single quotes (Col. 9, lines 19-27). It would have been obvious to one of ordinary skill in the art at the time of invention to assume that the pattern defined in a given annotation overlay could have been made to be "case-insensitive" as this would have benefited the matching of items in the target document by ignoring case since different authors might code the HTML in different ways. For example, some web authors like to capitalize HTML tags. By ignoring case, those tags would always be found. Likewise, some authors prefer to capitalize attribute names (e.g., ALT="").

In regard to dependent Claim 18, Gramlich fails to explicitly teach that *the*

positional information enables the selectively inserting step to operate with statically

generated document content as well as with dynamically generated document content.

However, Gramlich does teach that the requested document is first copied to the

merged document (the target) (Col. 11, lines 62-63). If one assumes that the requested

document is static, then the initial target document is also static. Once the annotation

overlays act on the target document, it becomes a dynamically generated document in

that the annotations are dynamically changing the contents of the original static

document. Hence, It would have been obvious to one of ordinary skill in the art at the

time of invention to conclude that the selectively inserting step would have been working

on both static and dynamically generated documents in this case, as claimed.

In regard to dependent Claims 19-20, claims 19-20 reflects the method of

enhancing document transcoding as claimed in claim 17, and is rejected along the

same rationale.

In regard to dependent Claim 21, Gramlich teaches *a definition of the*

annotation indicates whether the annotation should be inserted before or after the

location in that for example, in Table 3: 1)

http://info.cern.sh/hypertext/WWW/Daemon/User (3)(4) `Files can be real or

synthesized` [Insert after sentence] (5) Unfortunately, there is no way to tell the

difference between synthesized and real files; this makes it extremely difficult to reliably

cache HTML documents using the CERN server (Col. 12, lines 51-57). In this example,

the "[Insert after sentence]" require that the annotation occur after the location.

In regard to dependent Claim 23, <u>Gramlich</u> fails to explicitly teach that *the at least one specified annotation further specifies one or more rows and/or columns to be clipped from the tables.* However, <u>Gramlich</u> does teach that the action field of the annotation overlays (insert, delete, replace, and Run_Program) would all affect changes to the requested document based on the pattern sought (Col. 9, lines 35-54). It would have been obvious to one of ordinary skill in the art at the time of invention to assume that one of those changes could have been to delete (clip) one or more columns/rows of a table since the invention of <u>Gramlich</u> includes the possibility of annotation overlays that delete (clip) items from a requested document regardless of what those items are as long as the pattern is matched. The benefit would have been to provide a document for a given user or for further processing by other applications.

In regard to dependent Claims 24-25, <u>Gramlich</u> fails to specifically teach *a definition of a particular one of the specified annotations states at least one (key, value) pair as a condition that indicates when the particular annotation is to be inserted into a document.* However, <u>Gramlich</u> does teach that each of the annotation overlays (which can exist in groups (Col. 6, lines 58-67; Col. 7, lines 1-4)) contain patterns that are designed to match certain portions of the requested document (Col. 9, lines 18-33). The patterns can consist of practically anything. The actions to be taken once a pattern is identified can include an Insert action that inserts the contents of the arg field into the requested document at a specified location relative to the pattern found (Col. 9, lines 35-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to conclude that the invention of <u>Gramlich</u> could have used a key/value pair as a pattern to identify in the requested document, providing the benefit of locating a particular URL and inserting an annotation near it.

In regard to dependent Claim 26, <u>Gramlich</u> fails to explicitly teach that *the location is expressed using Xpath notation.* It is well known that XPath is a language for finding information in an XML document. XPath is used to navigate through elements and attributes in an XML document. Hence, it is a pattern matching language. <u>Gramlich</u> uses patterns in its annotation overlays. It would have been obvious to one of ordinary skill in the art at the time of invention to conclude that one could have used Xpath notation in the invention of <u>Gramlich,</u> just as one could have used any other form of pattern matching syntax. The benefit would have been to better locate patterns in a markup language document such as HTML, SGML, and XML an annotate them.

In regard to dependent Claim 29, Claim 29 reflects the method of enhancing

document transcoding as claimed in Claim 1 (and similarly Claim 27) and is rejected

along the same rationale.

7.   Claims 4, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Gramlich in view of Nagao, and in further view of Anderson et al. (hereinafter,

Anderson, U.S. Patent No. 5,581,682, filed 06/25/1992).

In regard to dependent Claim 4, Gramlich fails to teach that *at least one of the*

specified annotations is specified separately from the target document. However,

Anderson teaches that the annotations are overlaid on the final-form document much as

one would overlay one transparency slide over another where the topmost sheet

represents an annotation. In this way, it adds to the content of the document without

physically being written atop the bottom slide (the original). Using the two-slide

metaphor, Thus, Anderson teaches that the annotations are separate from the target

document as claimed (Col. 2, lines 24-36). It would have been obvious to one of

ordinary skill in the art at the time of invention to combine the teachings of Gramlich and

Anderson as both inventions relate to annotating documents. Anderson's teaching

provides the benefit of keeping the original document intact.

In regard to dependent Claim 22, <u>Gramlich</u> fails to explicitly teach that *the at least one specified annotation further specifies one or more exceptions to the clipping of the content.* However, <u>Anderson</u> teaches that in order to apply a reduction overlay, one needs to have proper security and that the security has to match the level assigned to the overlay (Fig. 5, block 8). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of <u>Gramlich</u> and <u>Anderson</u> as both inventions relate to annotating documents. Adding the teaching of <u>Anderson</u> further clarifies the annotation process described by <u>Gramlich</u>.

Response to Arguments

8.   Applicant's arguments, see Amendment, filed 07/01/2005, with respect to the rejection(s) of claim(s) 1, 27, 31, and 32 under <u>Gramlich</u> have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of <u>Nagao et al.</u> <u>Nagao</u>, in combination with <u>Gramlich</u> teaches the amended limitations of these claims.

Conclusion

9.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to James H. Blackwell whose telephone number is 571-

272-4089. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Heather R. Herndon can be reached on 571-272-4136. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

11.   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

James H. Blackwell
09/13/05

WILLIAM BASHORE
PRIMARY EXAMINER